

**Amendments to the Drawings:**

The attached replacement sheets of drawings include amendments to all of the original twenty sheets of drawings. They are attached hereto as **Appendix B** – Figures 1-20.

1  
a

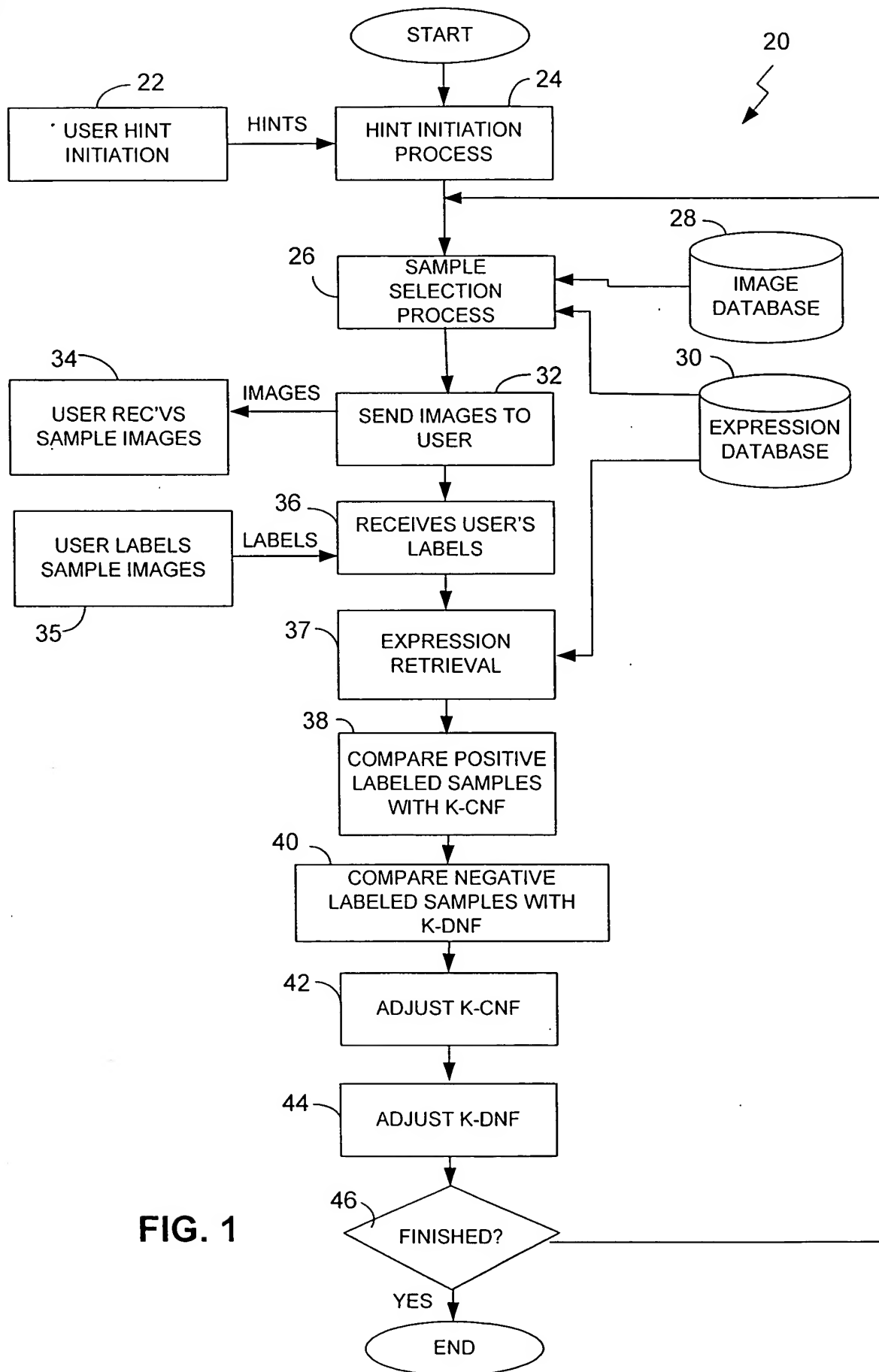


FIG. 1



Title: MAXIMIZING EXPECTED GENERALIZATION  
FOR LEARNING COMPLEX QUERY CONCEPTS  
Inventor(s): Edward Y. CHANG et al  
Application No.: 10/032,319  
Docket No.: 509952000100  
Replacement Sheet 2 of 20

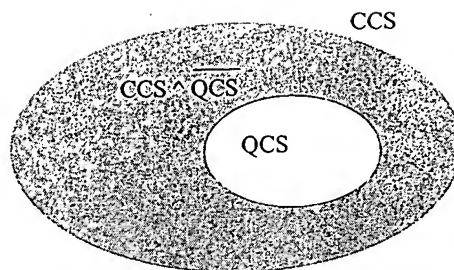


Figure 2: MEGA's Sampling Space:  $CCS \wedge \overline{QCS}$ .

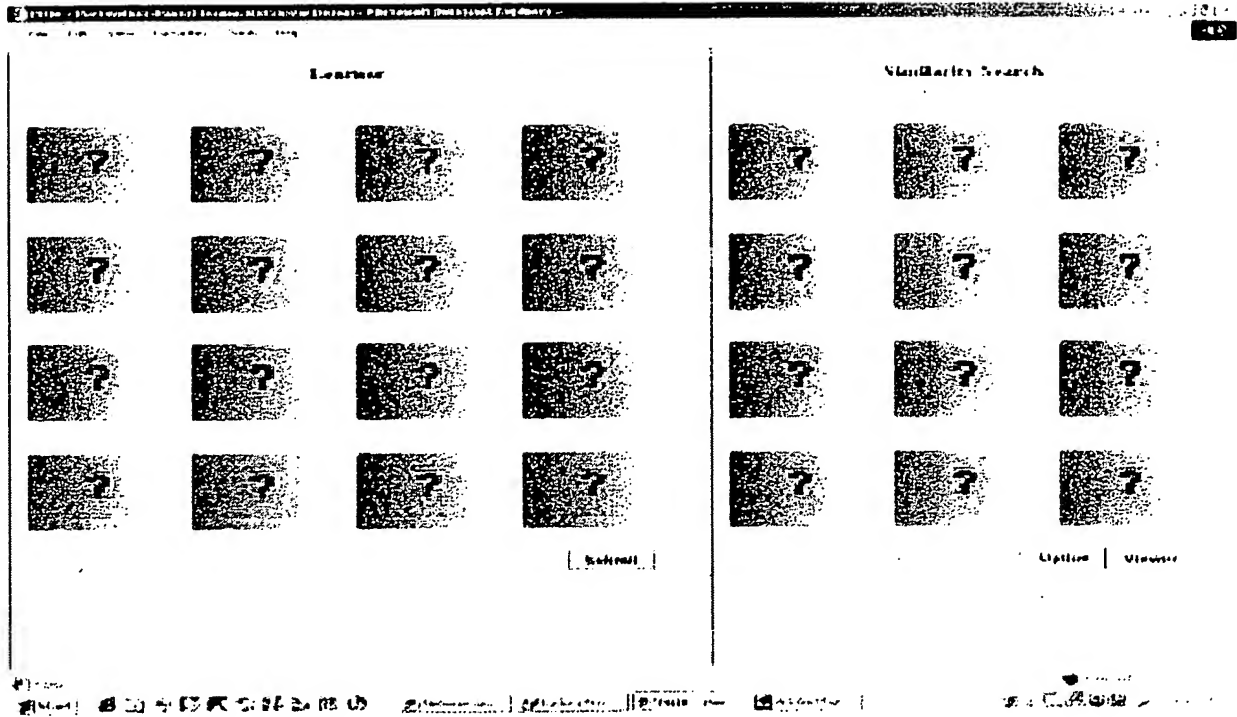


Figure 3: Wild Animal Query Screen #1.

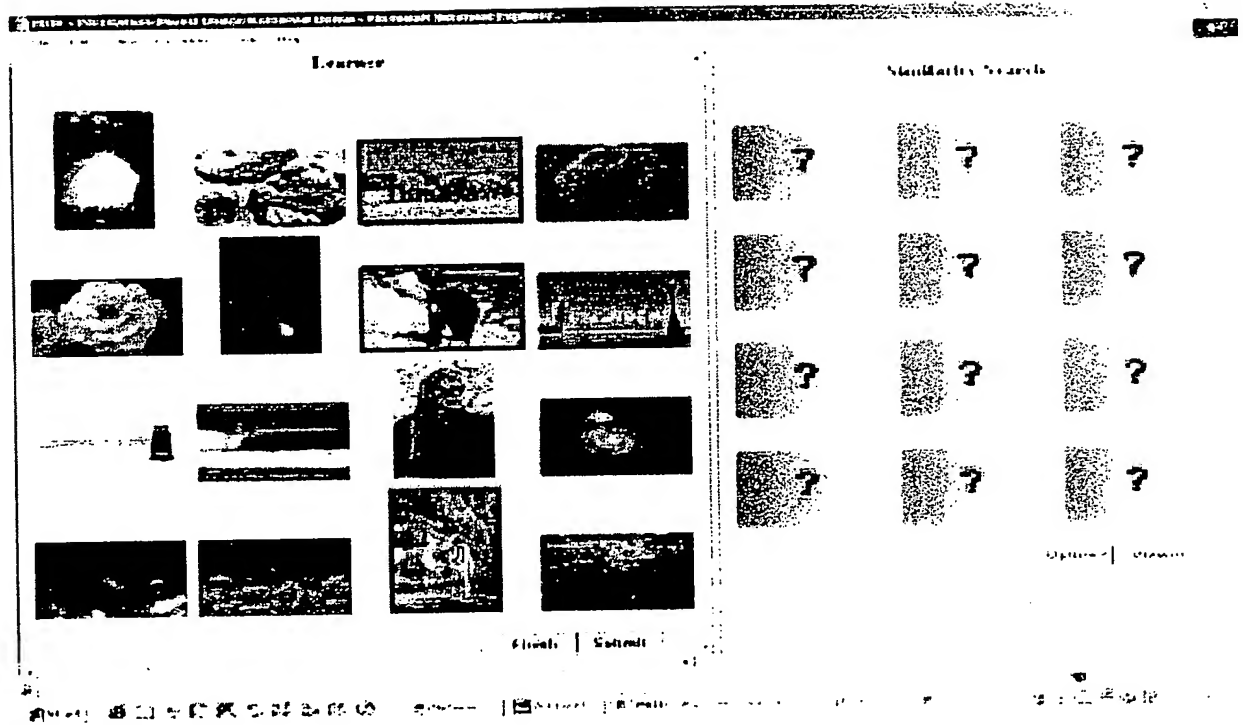


Figure 4: Wild Animal Query Screen #2.

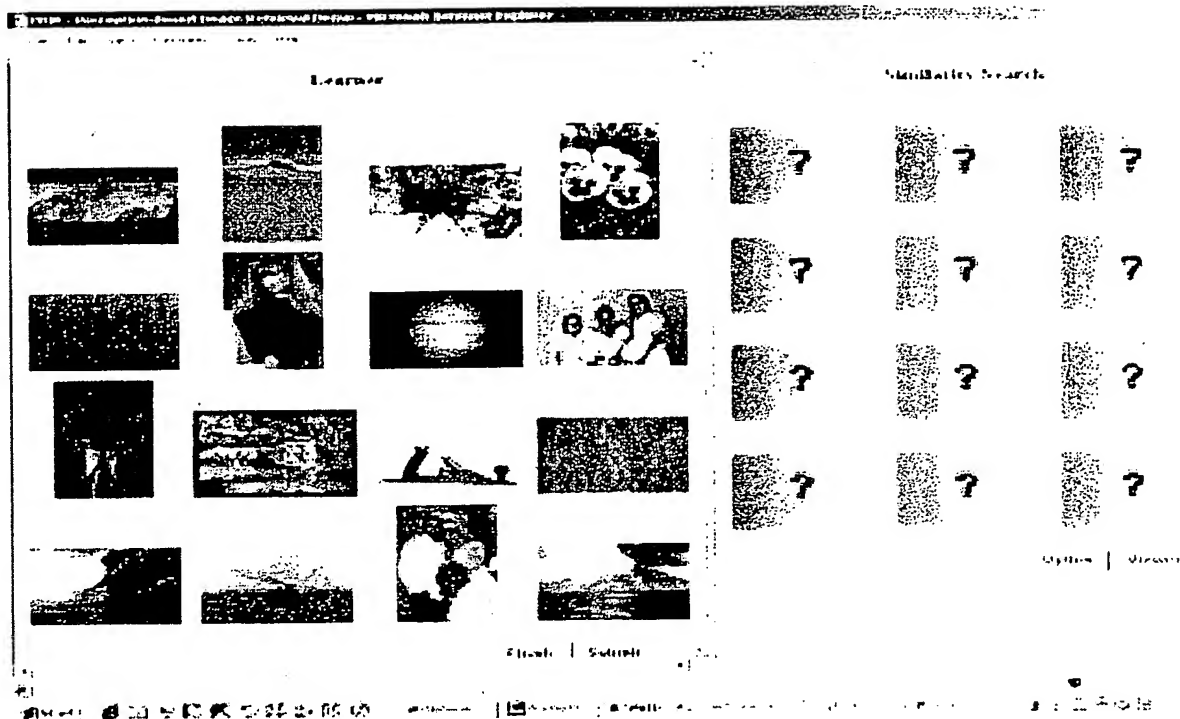


Figure 5: Wild Animal Query Screen #3.

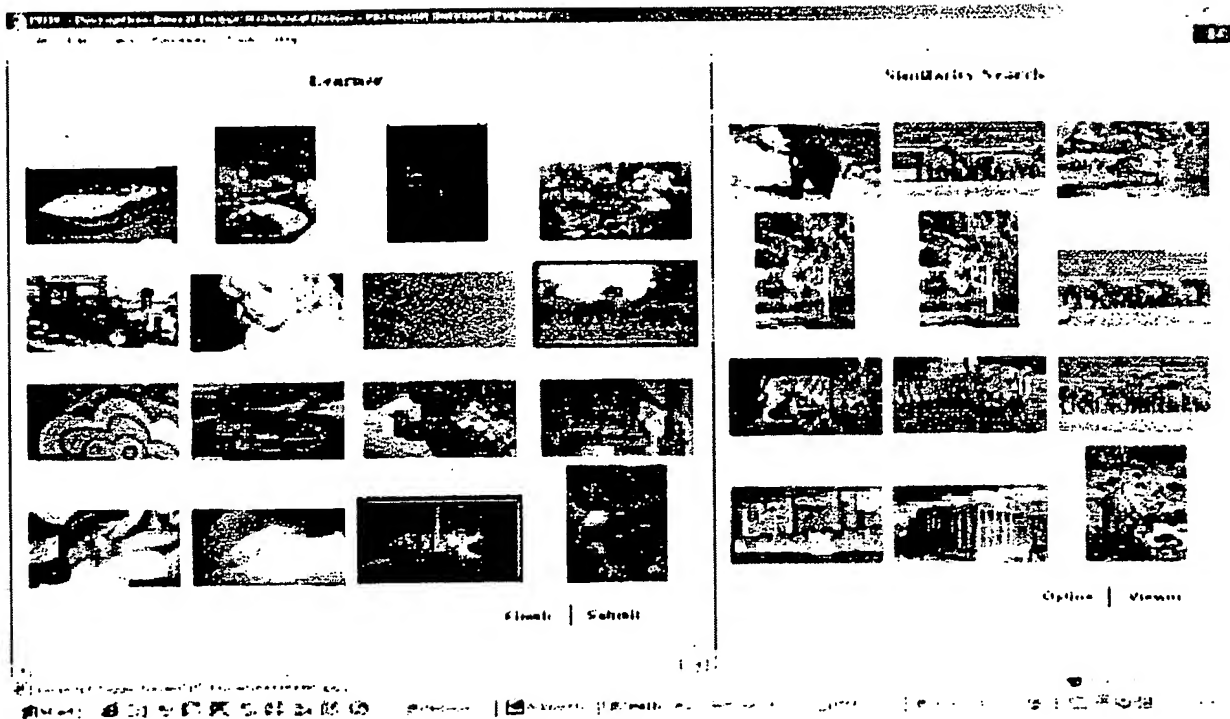


Figure 6: Wild Animal Query Screen #4.

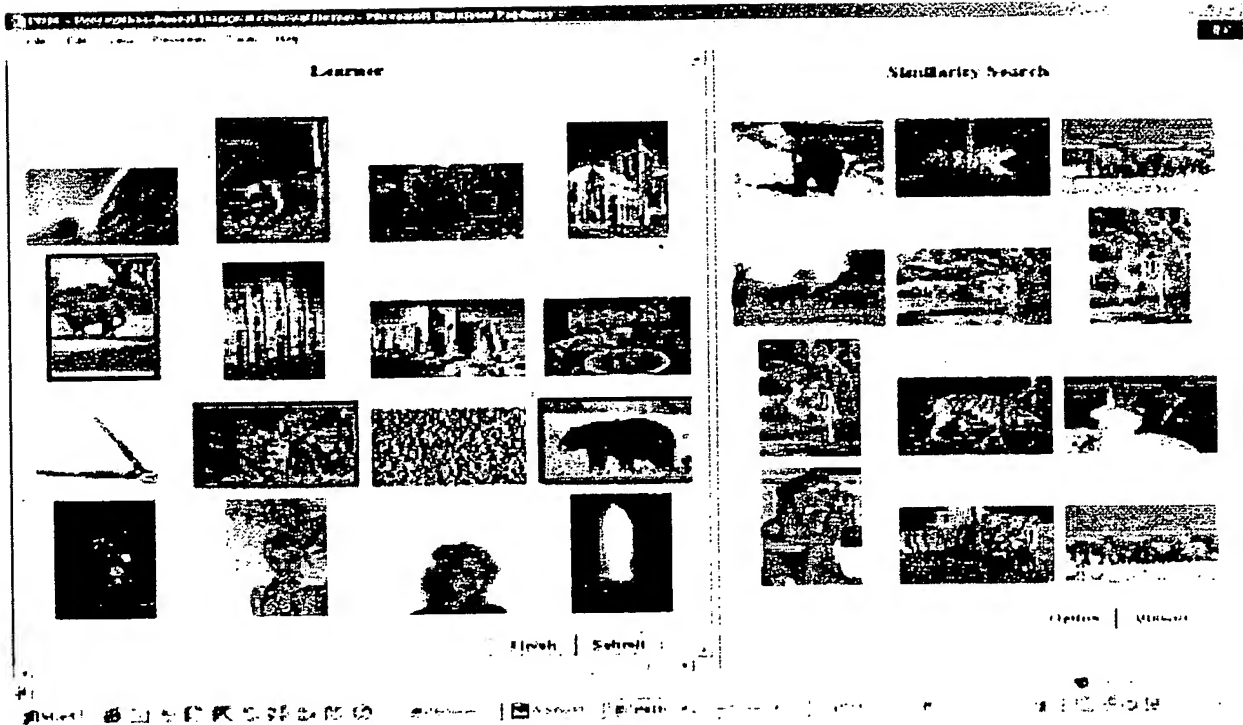


Figure 7: Wild Animal Query Screen #5.





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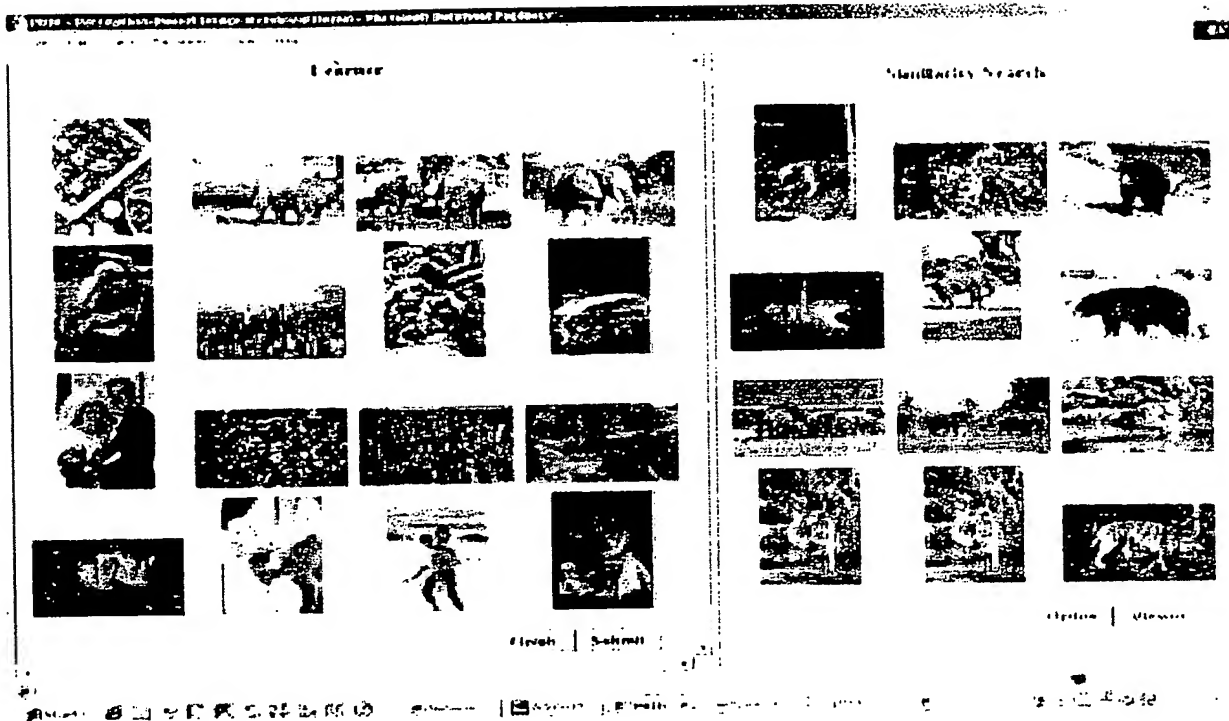


Figure 8: Wild Animal Query Screen #6.

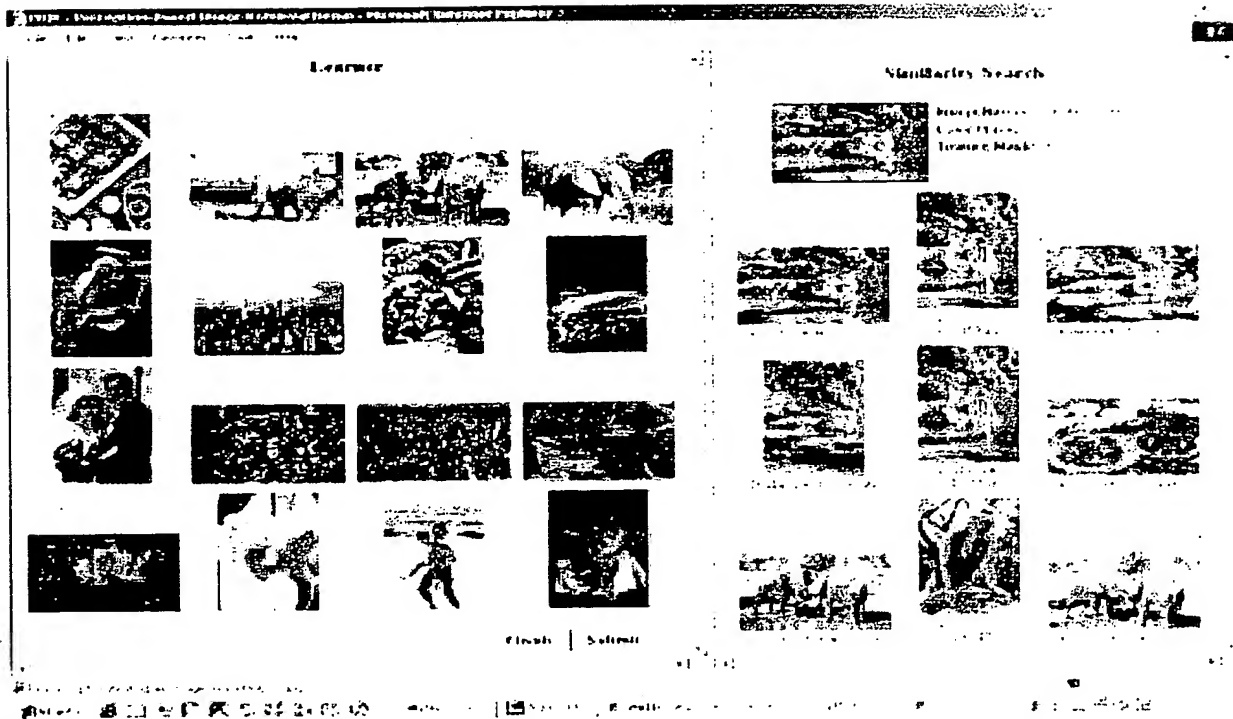


Figure 9: Wild Animal Similarity (Screen #7).



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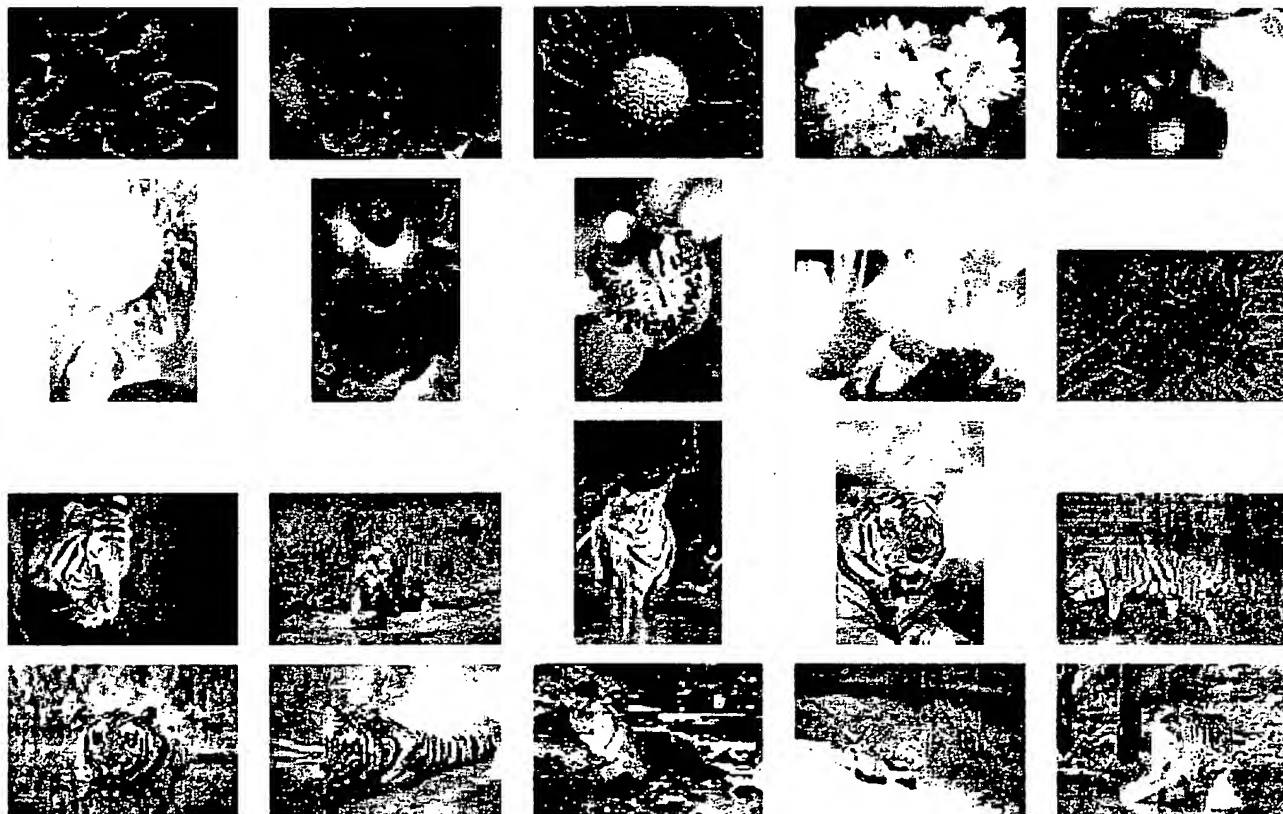


Figure 10: Flowers and Tigers Sample Query Results from SVM *Active*.

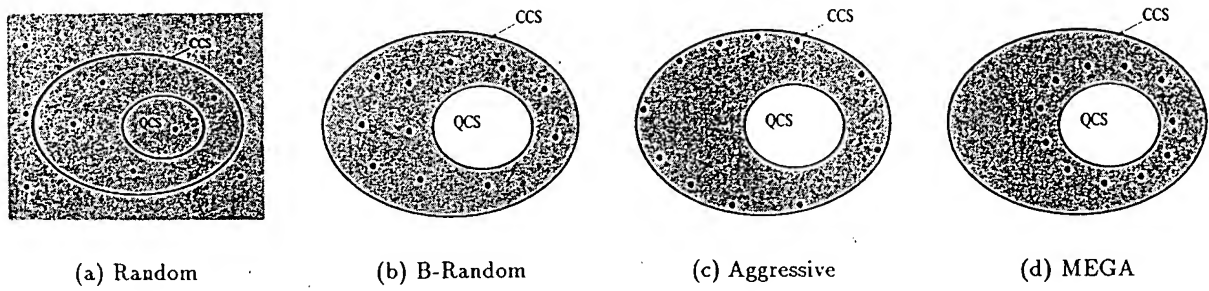
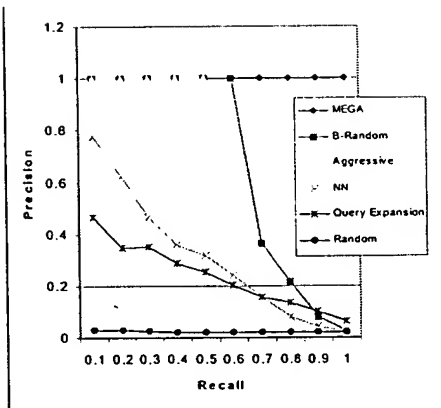
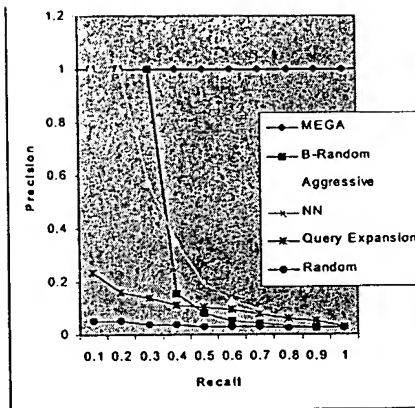


Figure 11: Sampling Schemes.

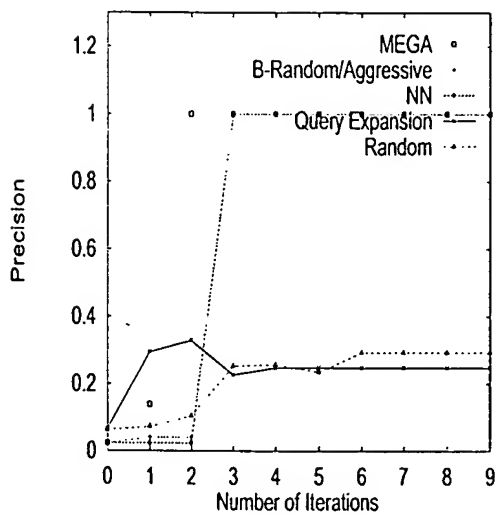


(a)  $(P_1 \vee P_2) \wedge P_3$

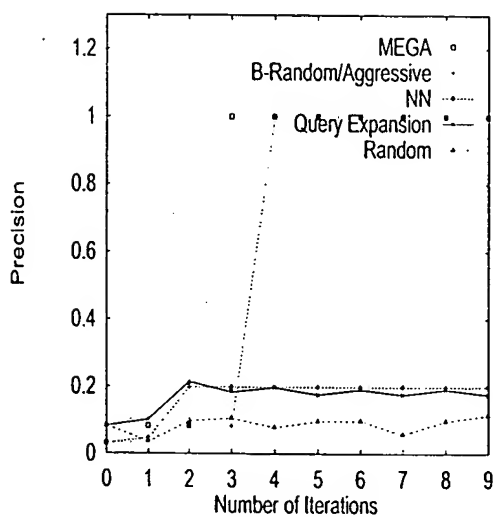


(b) Complex

Figure 12: Precision vs. Recall (10 Features).



(a)  $(P_1 \vee P_2) \wedge P_3$



(b) *Complex Query*

Figure 13: Precision of Six Schemes at Recall = 50%.



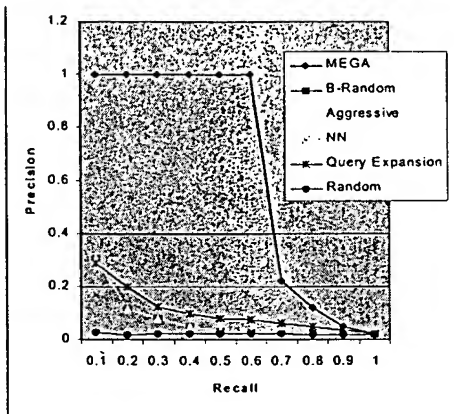
Title: MAXIMIZING EXPECTED GENERALIZATION  
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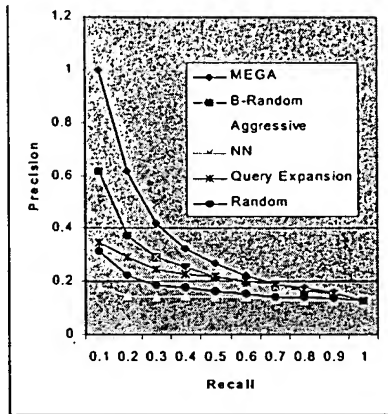
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(a)  $(P_1 \vee P_2) \wedge P_3$



(b) Complex

Figure 14: Precision vs. Recall (20 Features).



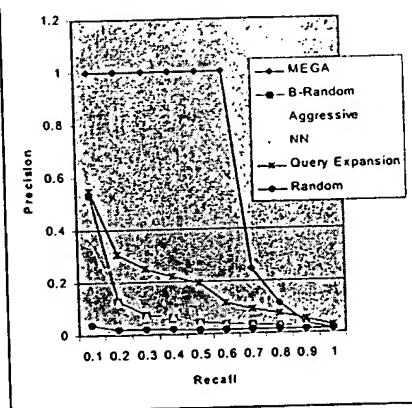
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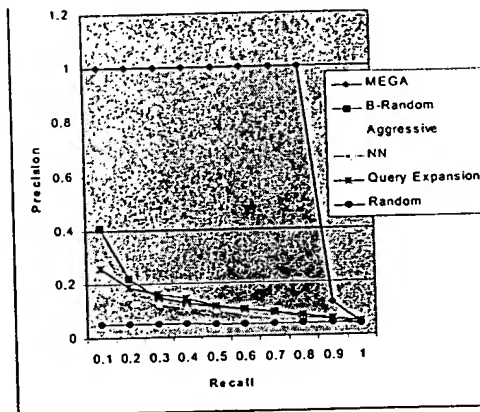
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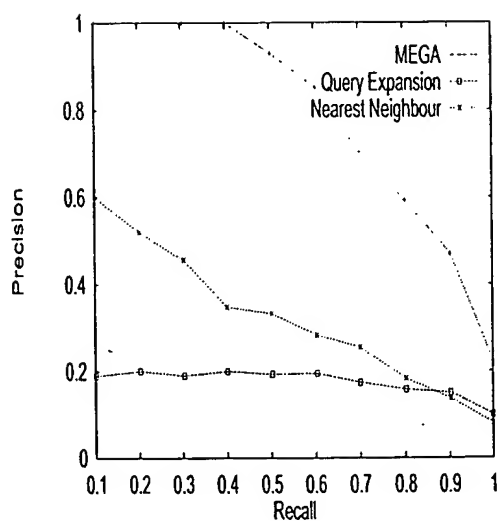
(a)  $(P_1 \vee P_2) \wedge P_3$



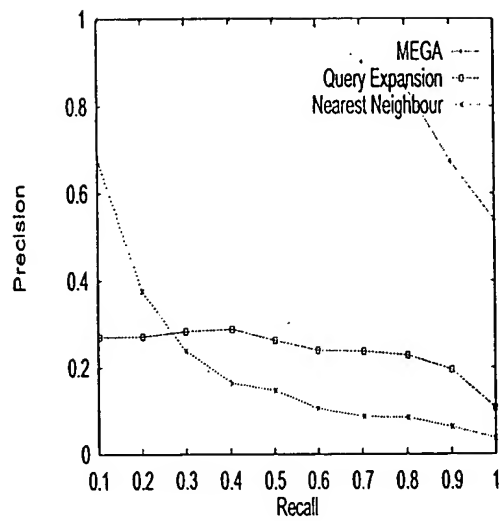
(b) Complex

Figure 15: Precision vs. Recall (30 Features).



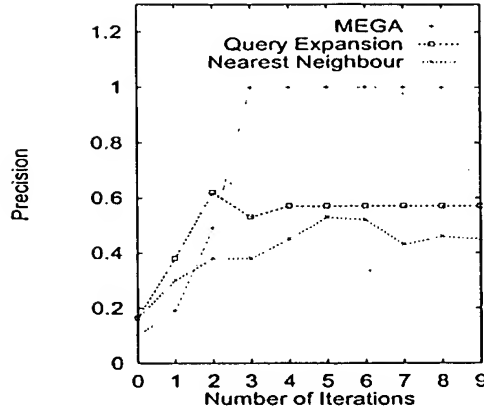


(a)  $\alpha = 0.3$

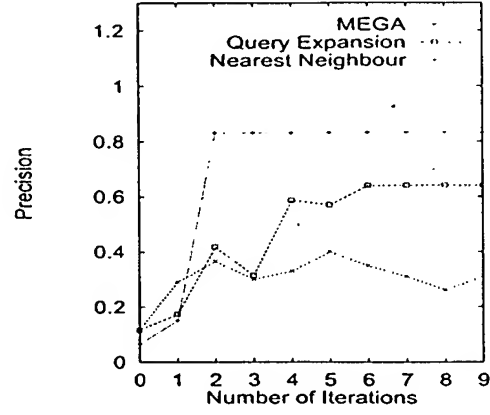


(b)  $\alpha = 0.5$

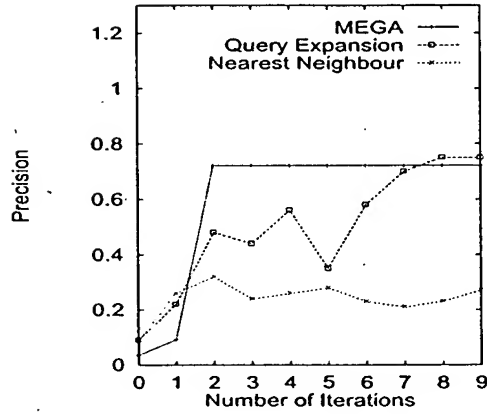
Figure 16: Recall vs. Precision (Model Bias Test).



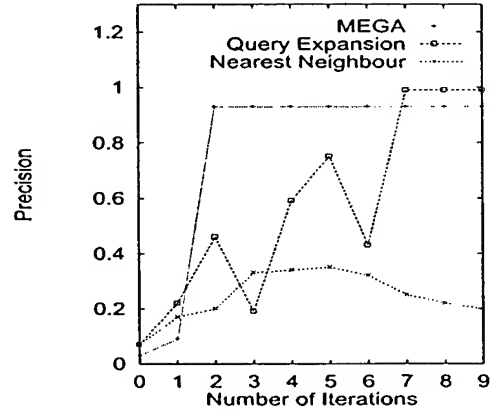
(a)  $\alpha = 0(1.0)$



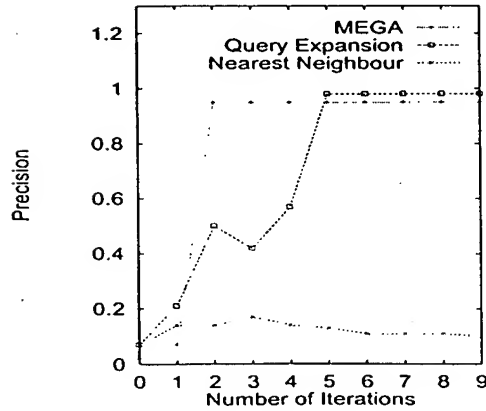
(b)  $\alpha = 0.1(0.9)$



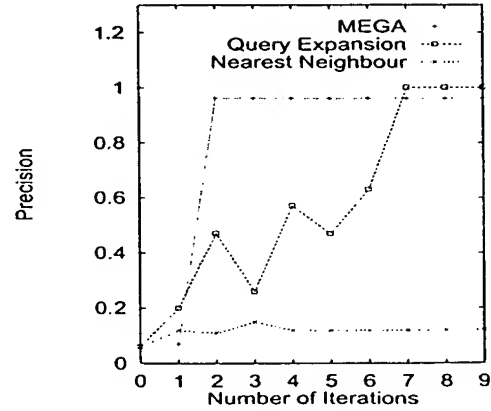
(c)  $\alpha = 0.2(0.8)$



(d)  $\alpha = 0.3(0.7)$



(e)  $\alpha = 0.4(0.6)$



(f)  $\alpha = 0.5$

Figure 17: The Effect of Different  $\alpha$ 's.

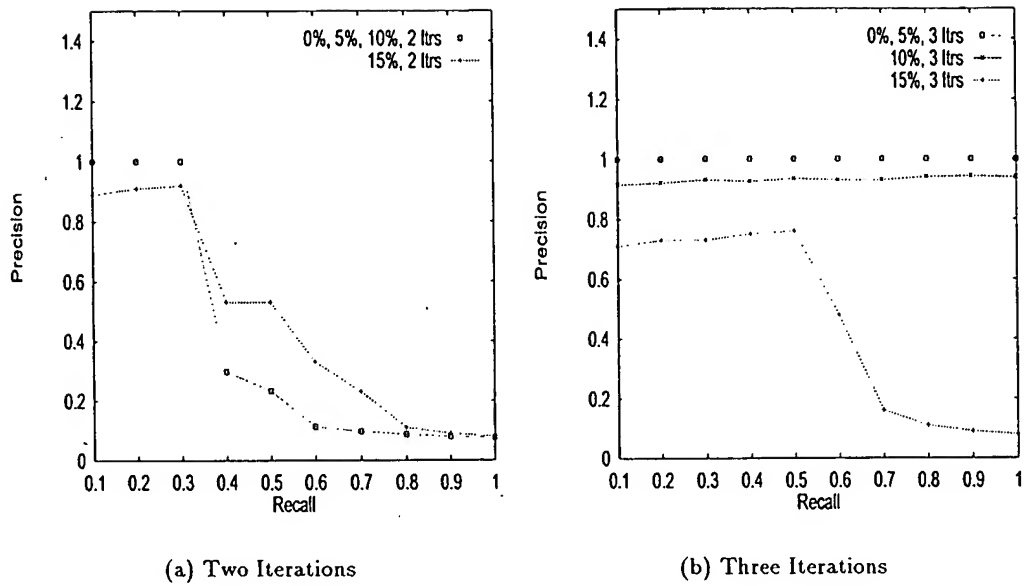
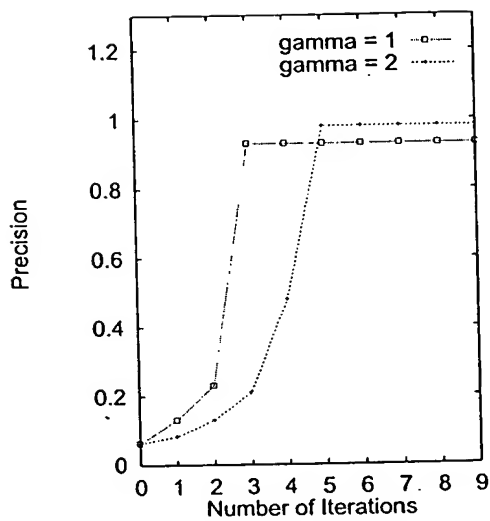
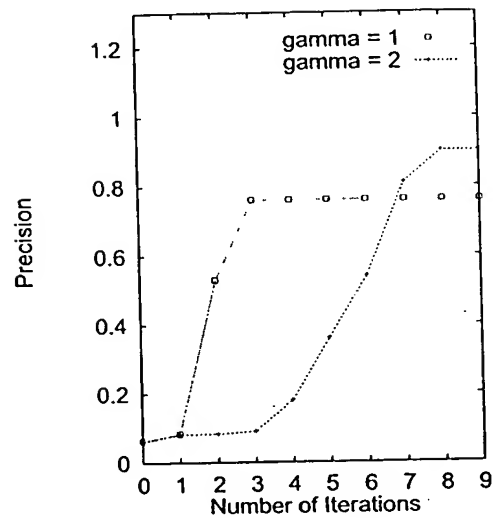


Figure 18: Precision/Recall Under 0%, 5%, 10% and 15% Noise.



(a) 10%



(b) 15%

Figure 19: Effects of Noise.

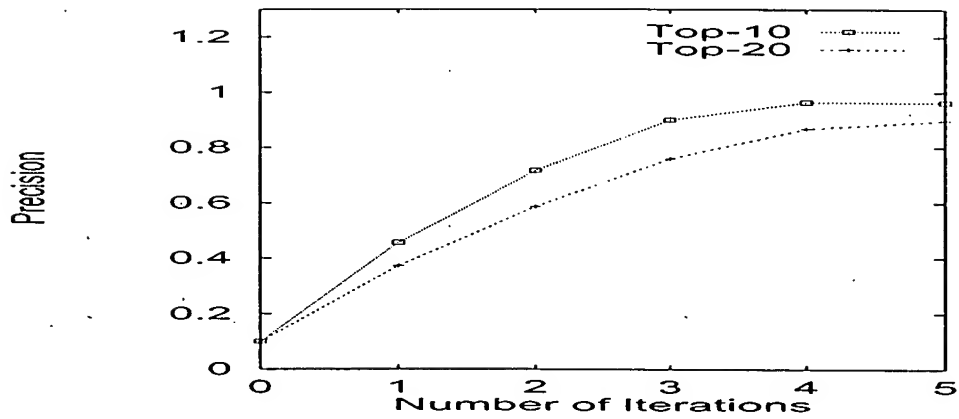


Figure 20: Average Precision of Top-10 and Top-20 Queries.

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